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09/614,026	07/11/2000	STEPHEN A. HOPPER	PF01949NA	1472

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EXAMINER
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SHARMA, SUJATHA R

ART UNIT	PAPER NUMBER
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2684

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14

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 14

Application Number: 09/614,026  
Filing Date: July 11, 2000  
Appellant(s): HOPPER ET AL.

Mathew C. Loppnow  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 4/26/04.

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**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences, which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

The amendment after final rejection filed on 2/9/04 has not been entered.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-7,9-18,20-26 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

6,104,712

Robert et al.

8-2000

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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2. Claims 1-7,9-18,20,21 are rejected under 35 U.S.C. 102(e) as being anticipated by Robert [US 6,104,712].

Regarding claims 1 and 12, Robert discloses an apparatus and method of operating an ad hoc network in a wireless environment. Robert discloses a transceiver capable of receiving positional information and a GPS system capable of generating positional information. See col. 2, lines 4-7, and lines 22-35. Robert further discloses a method where a pro-active region is selected based on the positional information of the users and a method of maintaining this information on the users of the proactive region. See abstract, background of the invention, summary of invention and column 4, line 34 – column 5, line 33. Robert further discloses a method of obtaining topographical information (indicated as terrain and environmental surroundings in the reference) on a region in which the wireless device/node is currently located and a method of selecting the users/nodes based on positional information and topographical information. See col. 2, lines 21-40.

Regarding claims 2,4,5,13,15,16 Robert further discloses a method where the positional information includes information on position, direction of travel and speed of the plurality of users in the ad hoc network. See abstract, col. 2, lines 20-40.

Regarding claims 3,6, 14,17 Robert discloses a method of selecting the users that are relatively stationary to be within the pro-active region. See column 4, line 34 – column 5, line 33.

Regarding claim 7, 18, Robert discloses a method where the users in the pro-active region are selected based on the position, direction of travel and speed. See column 4, line 34 – column 5, line 33.

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Regarding claims 9 and 20 Robert further discloses a method where the topographical information is used in selecting the users. See col. 2, lines 21-40.

Regarding claims 10,11,21, Robert further discloses a method of selecting the users based on RF map. See fig.1 and column 4, lines 34-42.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robert [US 6,104,712] in view of MPEP 2144.03 “well known prior art”.

Regarding claims 22-25, Robert as treated in claims 1 and 12 discloses all the limitations as claimed.

However he does not disclose a method where the topography information (indicated as terrain and environmental surroundings in the reference) is provided in a map.

The examiner takes official notice that it is obvious to provide topography information such as terrain, environmental surroundings such as buildings in a map in order to facilitate an easy method of analyzing the information in the process of forming the ad-hoc network.

Regarding claim 26, Robert discloses an apparatus and method of operating an ad hoc network in a wireless environment. Robert discloses a transceiver capable of receiving positional information and a GPS system capable of generating positional information. See col. 2, lines 4-7,

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and lines 22-35. Robert further discloses a method where a pro-active region is selected based on the positional information of the users and a method of maintaining this information on the users of the proactive region. See abstract, background of the invention, summary of invention and column 4, line 34 – column 5, line 33 and claim 7. Robert further discloses a method of obtaining topographical information (indicated as terrain and environmental surroundings in the reference) on a region in which the wireless device/node is currently located and a method of selecting the users/nodes based on positional information and topographical information. See col. 2, lines 21-40.

However he does not disclose a method where the topography information (indicated as terrain and environmental surroundings in the reference) is provided in a map.

The examiner takes official notice that it is obvious to provide topography information such as terrain, environmental surroundings such as buildings in a map in order to facilitate an easy method of analyzing the information in the process of forming the ad-hoc network.

### ***Response to Arguments***

The appellant on page 5, lines 14-23, argues that the primary reference teaches a method of forming an ad-hoc network based on environmental surroundings and terrain and therefore does not read on the limitation of the claims 1,12 and 26, which discloses a method of forming an ad-hoc network based on topography. The appellant argues that “topographic” information is not the same as “terrain and environmental information”. However the word “topography” is given it’s broadest meaning which according to the Webster’s English dictionary is defined as “natural and man-made features of a place especially in a way to show their relative positions

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and elevations; the configuration of a surface including its relief and the position of its natural and man made features". See attached copy of the meaning from Webster's dictionary.

Furthermore, the appellant argues on page 5, lines 24-29 that Robert reference does not disclose selecting a first portion of a plurality of users to be within a pro-active region based upon positional and topographic information. The appellant discloses a method of forming an ad-hoc network i.e. where devices communicate with one another and/or are routed through a number of devices to communicate with their ultimate destination. (See page 1, lines 16-18). The appellant is drawn to the reference, which teaches a method of forming an ad-hoc network i.e. where devices communicate with one another and/or is routed through a number of devices to communicate with their ultimate destination. See col. 1, line 55 – col. 2, line 31.

Further the reference also teaches a method where the nodes/devices are further refined/selected (thus forming a pro-active region) based on the positional information of the migratory nodes. See col. 2, lines 31-35.

The appellant on page 6, lines 4-9, further argue that the position information as taught in the reference does not constitute topography information. The examiner while agreeing to this would like to again draw attention to the Robert reference, col. 2, lines 35-40 where the reference teaches a method where nodes are selected based on environmental surroundings and terrain information. See col. 2, lines 35-40. The term "topography" in the present invention is given the broadest meaning, which in definition as discussed above includes terrain and environmental surroundings. Therefore the rejections as discussed in the office action mailed 9/10/03 (see paper # 8) and as discussed in this office action are considered proper.

For the above reasons, it is believed that the rejections should be sustained.



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Respectfully submitted,

*Sujatha Sharma*  
Sujatha Sharma

Examiner

Art Unit 2684

SS

June 23, 2004

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[illegible]

**to-po-cent-ric** \tə-pə-sen-trik, tō-'adj (ca. 1942) : relation-  
sured from, or as if observed from a particular point on the  
face : having or relating to such a point as origin (— com-  
pare GEOCENTRIC)  
**to-po-graph-** \tə-'pä-grä-fär-n (1603) : skilled in relating  
**to-po-graph-ic** \tə-pə-'grā-lik, tō-'adj (1632) : of topography  
cerned with topography (— maps)  
**to-po-graph-i-cal** \tə-'grā-lik adj (ca. 1576) 1 : TOPOGRAPHIC  
lating to, or concerned with the artistic representation of  
locality (> a poem) (— painting) — **to-po-graph-i-cal-**  
adv  
**topo-ra-phy** \tə-'nä-grä-fē-n [ME *topographie*, fr. LL *topo-*  
Gk, fr. *topographia* to describe a place, fr. *topos* place +  
write — more at CARVE] (15c) 1 a : the art or practice of  
lineation in detail use, on maps or charts of natural and man-  
made features b : topographical surveying 2 a : the con-  
figuration and elevation including its relief and the position of its natu-  
ral features b : the physical or natural features of an area  
and their structural relationship  
**topo-top-o-log-i-cal** \tə-pə-'näs-jē-kəl adv (1873) 1 : or relating  
to : being or involving properties unaltered under a homeo-  
morphism (connectedness are — properties) — **topo-**  
-k(ə-)lē\ adv  
**topological group** n (1946) : a mathematical group which i-  
logical space, whose multiplicative operation is continuous  
given any neighborhood of a product there exist neighbor-  
hoods containing each of those neighborhoods form a base  
representing each of these neighborhoods and whose opera-  
tion is continuous such that for any neighborhood of the  
product there exists a neighborhood of the element in  
each factor whose inverse in the other neighborhood of the  
product contains the identity  
**topologically equivalent** adj (1915) : related by a homeomor-  
phism  
**topological space** n (1926) : a set with a collection of subsets  
the conditions that both the empty set and the set itself  
be members, the union of any number of the subsets is also  
a member, and the intersection of any finite number of  
members is a member of the collection  
**topological transformation** n (1946) : HOMEOMORPHISM  
**topo-pol-o-gy** \tə-'pä-lə-jē, tō-'n pl -gies [ISV] (1850) : the  
study of a particular place ; *specific* : the history of a region  
by its topography 2 (1) : a branch of mathematics con-  
cerned with those properties of geometric configurations (as point sets)  
unaltered by elastic deformations (as a stretching or a twisting)  
homeomorphisms (2) : the set of all open subsets of a topological  
space b : CONFIGURATION (~ of a molecule) (<-  
field) — **to-pol-o-gist** \jīst n  
**top-on-ym** \tə-pə-'nim, tō-'n [ISV, back-formation  
(1899) : PLACE-NAME  
**top-on-ym-ic** \tə-pə-'ni-mik, tō-'adj (1896) : of or  
relating to onyms or toponymy — **top-on-ym-ical** \mi-kəl-  
ad-verb  
**top-on-y-m-y** \tə-pə-'nə-mē, tō-'n [ISV, fr. *topon-* + Gk  
name — more at NAME] (1876) : the place-names of a re-  
gion ; esp. the etymological study of them — **top-on-**  
-ym-y n  
**to-pos** \tō-'pās, 'tā-'n, pl **to-poi** \tō-'poi [Gk, short for  
common place] (1936) : a traditional or conventional  
place or theme or topic  
**top-per** ('tä-pər) (1638) 1 : one that puts on or takes  
off (as at a dance) the top 3 a : SILENT HAT b : OPERA HAIR  
(as a joke) that caps everything preceding 5 : a wig and  
loose-fitting lightweight outer coat  
**top-pling** ('tä-plin) (14c) 1 : something that forms  
the top of a vase, bread crumbs, or whipped cream 2 :  
food for flavor or decoration 2 : the action of one thing  
removed by topping 1 : highest in rank or em-  
ployment  
**'topping** adj (ca. 1685) 1 : highest in rank or em-  
ployment : PROUD, ARROGANT 3 chiefly Brit : EXCELLENT  
**top-ple** \tə-'plē vb **top-pled** ; **top-pling** \pə-'llp-  
(1590) : to fall from or as if from being top-heavy 1  
topple 2 a : OVERTHROW 2 b : DEFEAT 3  
**top round** n (1903) : meat from the inner part of a rump  
**'tops** \təps' adj [pl. of 'top] (1935) : topmost in qual-  
ity, or importance — used predicatively (*his work is tops*)  
**'tops** adv (1956) : at the very most (will cost \$50, —  
tops) — **top-sail** \təp-'sāl, -səl/ also **top-s'l** \səl-'sāl (14c) :  
the uppermost sail on a mast in a square-rigged ship  
above and sometimes on the gaff in a fore-and-aft rig  
**top secret** adj (1944) 1 : protected by a high degree  
of secrecy (a top secret meeting) 2 : containing  
information whose unauthorized disclosure could result  
in grave damage to the nation (or relating to top secret in-  
formation)  
**top sergeant** n (1898) : FIRST SERGEANT 1  
**top-shell** \təp-'shell' adj (ca. 1892) : of the best quality  
— **top-side** \təp-'sid' n (1815) 1 pl : the top portion of  
a ship on each side above the waterline 2 : the  
upper portion of the ionosphere  
**'topside** adv (1873) 1 : to or on the top  
2 : on deck  
**Top-Sid-er** \təp-'sid-'ər trademark — used for  
a rubber sole  
**top-soil** \təp-'soil' n (1836) : surface soil suitable  
for growing plants  
**top-spin** \təp-'spin' n ('top) (1902) : a rotary motion  
causes it to rotate forward in the direction of travel  
**top-stitch** \təp-'stich' v (1934) : to make a stitch  
side of a garment close to a seam  
**top-sy-tur-vi-ness** \təp-'sar-'və-nəs' n (1822)  
being topsy-turvy